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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,167	12/29/2000	Merle L. Miller	2069.008600	8941
23720	7590	05/02/2005	EXAMINER	
WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			HAROLD, JEFFEREY F	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/752,167

Applicant(s)

MILLER, MERLE L.

Examiner

Jefferey F. Harold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. ***Claims 1-3 and 10-22*** are rejected under 35 U.S.C. 102(e) as being anticipated by Caine et al. (United States Patent 6,735,302), hereinafter referenced as Caine.

Regarding **claim 1**, Caine discloses a DSP based LSIC architecture with current sensing voltage synthesis impedance matching and DC feed control. In addition, Caine discloses a method for ring-trip detection in a line card, comprising: using an analog-to-digital converter for processing voice signal; using the analog-to-digital converter for DC feed control; receiving a ringing control signal; transmitting a ringing signal to a subscriber line in response to the ringing control signal; receiving a portion of the ringing signal from the subscriber line; converting the portion of the ringing signal to a digital signal using the digital-to-analog converter; and providing a ring-rip indication in response to the digital signal, as disclosed at column 3, line 34 through column 4, line 33 and column 9, lines 37-60.

Regarding **claim 2**, Caine discloses everything claimed as applied above (see claim 1), in addition, Caine discloses wherein the ringing signal comprises an AC signal, as disclosed at column 3, line 34 through column 4, line 33 and column 9, lines 37-60.

Regarding **claim 3**, Caine discloses everything claimed as applied above (see claim 1), in addition, Caine discloses further including terminating the ringing signal in response to the ring-trip indication, as disclosed at column 3, line 34 through column 4, line 33 and column 9, lines 37-60.

Regarding **claim 7**, Caine discloses an apparatus comprising: first circuitry comprising an analog-to-digital converter that is employed for processing of voice signals and for DC feed control; a ringing generator capable of providing a ringing signal to a subscriber line in response to receiving a ringing control signal; second circuitry capable of delivering the portion of the ringing signal to the analog-to-digital converter of the first circuitry, wherein the analog-to-digital converter converts the portion of the ringing signal to a digital signal; and ring trip detection logic capable of providing a ring-trip indication in response to the digital signal, as disclosed at column 3, line 34 through column 4, line 33 and column 9, lines 37-60.

Regarding **claim 8**, Caine discloses everything claimed as applied above (see claim 7), in addition, Caine discloses further including third circuitry capable of terminating the ringing signal in response to the ring-trip indication, as disclosed at column 3, line 34 through column 4, line 33 and column 9, lines 37-60.

Regarding **claim 9**, Caine discloses a feed back path having an input and output terminal, the feedback path including an analog-to-digital converter for processing voice

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signals; a switch capable of coupling the input and output terminal of the feed back path in response to receiving a control signal; and a ringing generator capable of providing a ringing signal to a subscriber line in response to the control signal, as disclosed at column 3, line 34 through column 5, line 59 and column 9, lines 37-60.

Regarding **claims 10-22**, they are interpreted and thus rejected for the reasons set forth above in the rejection of claims 1-3, 8 and 9.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-3 and 7-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is 571-272-7519. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JFH  
April 28, 2005



Jefferey F Harold  
Examiner  
Art Unit 2644